



# **EM500-PP** Pipe Pressure Sensor



## Introduction

EM500-PP pipe pressure sensor is a long range wireless sensor compatible with standard LoRaWAN protocol. Combining with the advanced LoRa technology and 19000mAh battery make it a low power consumption product with years-long use life. It is designed to measure the pressure of water/oil/gas of multiple types of pipes and it is the fundamental component of a leak detection system.

#### Features

- Up to 11km communication range
- High efficiency lightning-protection, auti-radio frequency and electromagnetic interference protection
- Corrosion resistance, vibration resistance and wide operating temperature
- High precision with temperature compensation
- Standard LoRaWAN protocol
- Easy configuration via NFC
- Ursalink Cloud and third-party platform compliant
- Low power consumption with 19000 mAh replaceable battery
- 1-Year Warranty Included

#### Applications

- Pressure monitoring in pipelines and tanks
- ✓ Oil &Gas monitoring
- ✓ Leak detection
- ✓ Level/depth monitoring in tanks and cisterns

## Specifications

Model	EM500-PP	
Measurement		
Pressure Type	Gauge Pressure	
Range	0~1600 kPa(16 Bar)	
Accuracy	±0.5% FS	
Resolution	1 kPa(0.01 Bar)	
Overload	150% FS	
Long-term Stability	±0.3% FS/year	
Process Connection	G 1/4" Female	
LoRaWAN		
Frequency	EU433/CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923	
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)	
Sensitivity	-147dBm @300bps	
Mode	OTAA/ABP Class A	
Antenna	Integrated ceramic antenna	
Physical Characteristics		
Cable Length	1.5m	

Power Supply	19000 mAh Li-SOCL <sub>2</sub> battery (ER34615)	
Operating Temperature	Transceiver: -30°C to +70°C	
	Pressure Sensor: -30°C to +80°C	
Ingress Protection	Transceiver—IP66 (IP67 as required)	
	Pressure Sensor—IP65	
Dimension	$105.4 \times 71 \times 69.5$ mm (Waterproof connector and sensor are not included)	
Mounting	Pole, wall, DIN rail	
Operation		
Power On & Off	NFC, power button (Internal)	
Configuration	Mobile APP or PC software via NFC, USB Type-C	

### Order Information

Model	Measuring Range
EM500-PP-G1/4F-4780	0~1600kPa, G1/4" Female

